AMENDMENTS TO THE CLAIMS

Please replace the claims, including all prior versions, with the listing of claims found below.

Listing of Claims:

Claim 1.   (Previously Cancelled)

Claim 2.   (Previously Cancelled)

Claim 3.   (Previously Cancelled)

Claim 4.   (Previously Cancelled)

Claim 5.   (Previously Cancelled)

Claim 6.   (Previously Cancelled)

Claim 7.   (Previously Cancelled)

Claim 8.   (Previously Cancelled)

Claim 9.   (Previously Cancelled)

Claim 10.   (Currently amended) A method for statistical multiplexing of ATM connections comprising:

conducting a plurality of ATM connections over a common connecting line, the plurality of ATM connections having an effective bandwidth reserved for conduction of the aggregate of the plurality of ATM connections on the connecting line and utilizing an acceptance algorithm that allocates potential added connections to one of a first class and a second class; and

deciding whether an additional potential added connection can be accepted by the common connecting line based on acceptance criteria and a prescribed effective bandwidth, the deciding step comprising:

identifying the prescribed effective bandwidth on a step-by-step basis with at least one of a setup and a release of connection, wherein the identification starts from an initial value and the acceptance algorithm is performed at every step;

determining whether at least one of the additional potential added connection or a released connection may be accepted by at least one of the first class and the second class;

defining a first bandwidth representative of the first class and a second bandwidth representative of the second class;

modifying at least one of the first and second bandwidths by at least one of a sustainable cell rate and a peak cell rate based on the acceptance of the additional potential added connection to at least one of the first class and the second class; and

at least one of accepting and rejecting the additional potential added connection based on at least the identified prescribed effective bandwidth and the acceptance criteria.

Claim 11. (Previously presented) The method according 10, wherein the sustainable cell rate is an upper limit for an average cell rate with which the cells are transmitted during existence of the connection and the peak cell rate is of the corresponding connection.

Claim 12. (Previously presented) The method according to claim 10, wherein at least one of the acceptance criteria is established such that, in the case of the connection setup, when the additional potential added connection can be accepted to the first class, a calculation is performed to determine whether the first bandwidth identified is adequate including this connection, wherein the first bandwidth is not allowed to exceed the sum of the peak cell rates of all connections and the first bandwidth is incremented by the first traffic parameter value when the at least one of the acceptance criteria is met and the first bandwidth is incremented by the second traffic parameter value when the at least one of the acceptance criteria is not met.

Claim 13. (Previously presented) The method according to claim 12, wherein when the additional potential added connection cannot be allocated to the first class, it is automatically allocated to the second class and the second bandwidth is incremented by the second traffic parameter value.

Claim 14. (Previously presented) The method according to claim 10, wherein at least one of the acceptance criteria is established such that, in the case of the connection release when the released connection can be accepted by the first class, a calculation is performed to determine whether the first bandwidth, exclusive of this connection, is adequate for the remaining connections, wherein the

first bandwidth is not allowed to exceed the sum of the peak cell rates of all connections and the first bandwidth is diminished by the second traffic parameter value when the at least one of the acceptance criteria is met and the first bandwidth is diminished by the first traffic parameter value when the at least one of the acceptance criteria is not met.

Claim 15. (Previously presented) The method according to claim 14, wherein when the connection to be released cannot be allocated to the first class, it is automatically allocated to the second class and the second bandwidth is diminished by the second traffic parameter value.

Claim 16. (Previously presented) The method according to claim 11, wherein at least one of the acceptance criteria is established such that when the connection to be released is allocated to the first class, a calculation is performed to determine whether the first bandwidth without this released connection is adequate for the remaining connections; and wherein the first bandwidth is diminished by the second traffic parameter value when the at least one acceptance criterion is met and the value of the identified first bandwidth is upwardly limited by the sum of the peak cell rates of the first class.

Claim 17. (Previously presented) The method according to claim 11, wherein the effective bandwidth is derived from the sum of the first and second bandwidth.

Claim 18. (Previously presented) The method according to claim 11, wherein the acceptance algorithm is started only once per connection to be one of potentially added and released.

Claim 19. (Newly added) A method for statistical multiplexing of ATM connections comprising:

conducting a plurality of ATM connections over a common connecting line, the plurality of ATM connections having an effective bandwidth reserved for conduction of the aggregate of the plurality of ATM connections on the connecting line and utilizing a sigma rule algorithm that allocates potential added connections to one of a first class and a second class; and

deciding whether an additional potential added connection can be accepted by the common connecting line based on acceptance criteria and a prescribed effective bandwidth, the deciding step comprising:

identifying the prescribed effective bandwidth on a step-by-step basis with at least one of a setup and a release of connection, wherein the identification starts from an initial value and the sigma rule algorithm is performed at every step;

determining whether at least one of the additional potential added connection or a released connection may be accepted by at least one of the first class and the second class;

defining a first bandwidth representative of the first class and a second bandwidth representative of the second class;

modifying at least one of the first and second bandwidths by at least one of a sustainable cell rate and a peak cell rate based on the acceptance of the additional potential added connection to at least one of the first class and the second class; and

at least one of accepting and rejecting the additional potential added connection based on at least the identified prescribed effective bandwidth and the acceptance criteria.